FIN 300 Formula Sheet

Various formulas referenced in lectures:

- Enterprise Value = Market Value of Equity + Debt – Cash
- $Enterprise\ Value = \sum_{t=1}^{\infty} \left(\frac{FCF_t}{(1+r)^t}\right)$
- $project\ NPV = \sum_{t=1}^{\infty} \frac{\Delta FCF_t}{(1+r)^t}$
- FCF = EBIT(1-t) + Depreciation – ΔNWC– Capital Expenditure
- $PV_0 = \frac{CF_1}{r-g}$
- $\frac{EBIT}{Interest\ Expense}$
- $r_f + B(r_m - r_f)$
- $FV = PV(1+r)^n$
- $PV = \frac{FV}{(1+r)^n}$
- $PV = \frac{CF}{r}$
- $t * D$

$$WACC = r_E\left(\frac{E}{D+E}\right) + r_D(1-t)\left(\frac{D}{D+E}\right)$$

$V_L = V_U + t * D - PV(\text{Financial distress})$

$$\left(\sum_{t=0}^{N} \frac{D_0(1+g_1)^t}{(1+r)^t}\right) + \frac{\left\{\frac{D_N(1+g_2)}{r-g_2}\right\}}{(1+r)^N}$$

$$\left[\sum_{t=0}^{N} \frac{FCF_0(1+g_1)^t}{(1+wacc)^t}\right] + \frac{\frac{FCF_N(1+g_2)}{wacc-g_2}}{(1+wacc)^N}$$

Excel Formula Prompts

=NPV(rate, value1, [value2], ...)

=IRR(values)

=PV(rate, nper, pmt, [fv])